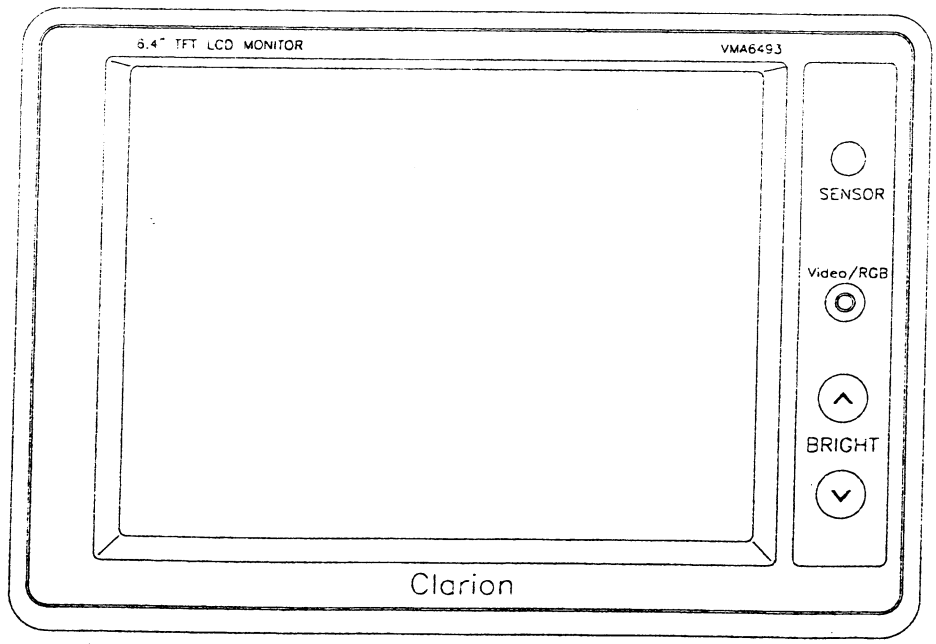
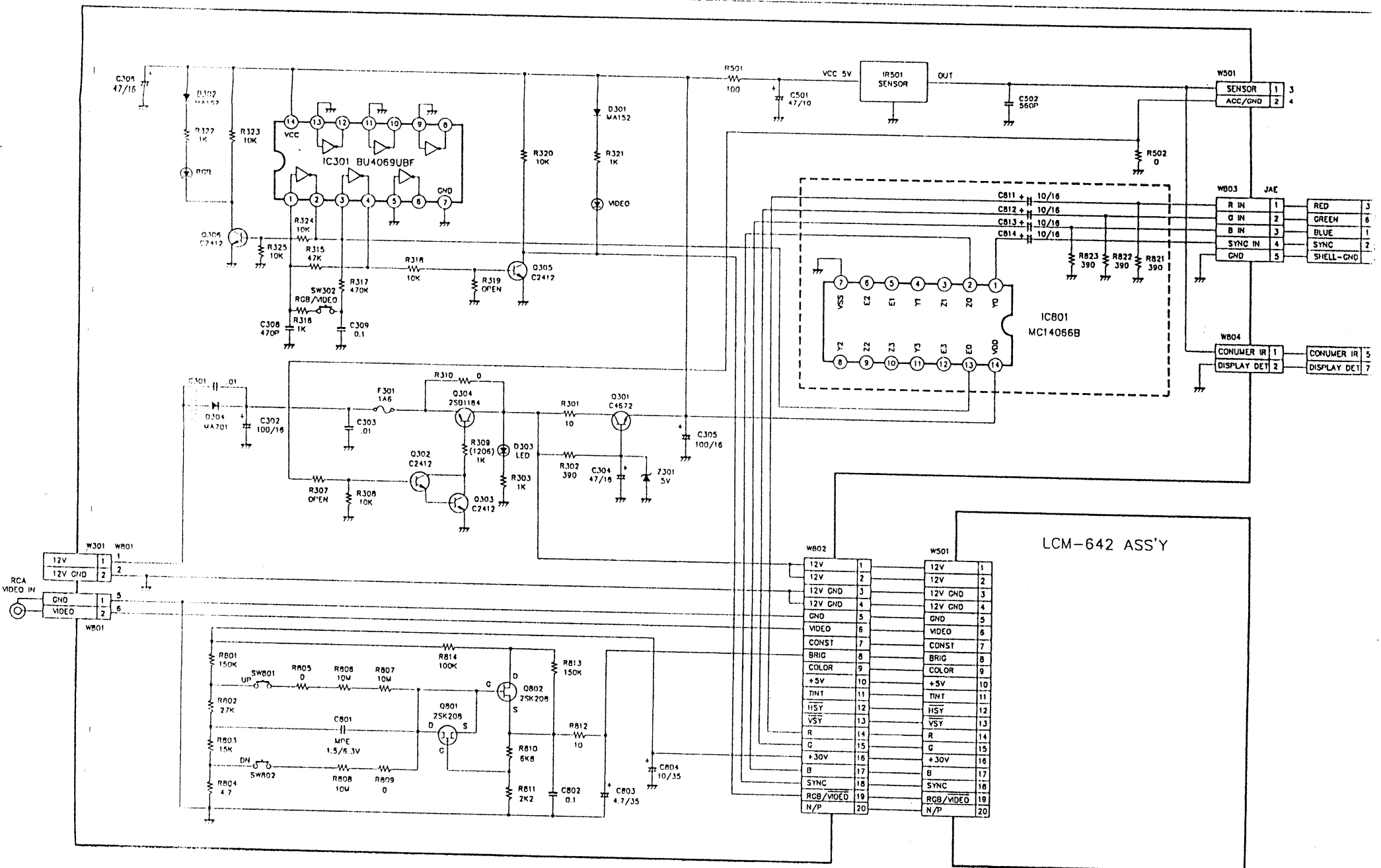
Service Manual

6.4" ACTIVE MATRIX TFT COLOR LCD MONITOR

MODEL NO: VMA6493



Clarion



SUBFIX	MOD RECORD
AA	2000/03/08
AB	
AC	
AD	
AE	

ACTION ELECTRONIS CO., LTD.
德聲電子股份有限公司

TITLE: LCM-647/647D SCHEMATIC DIAGRAM (CONTROL

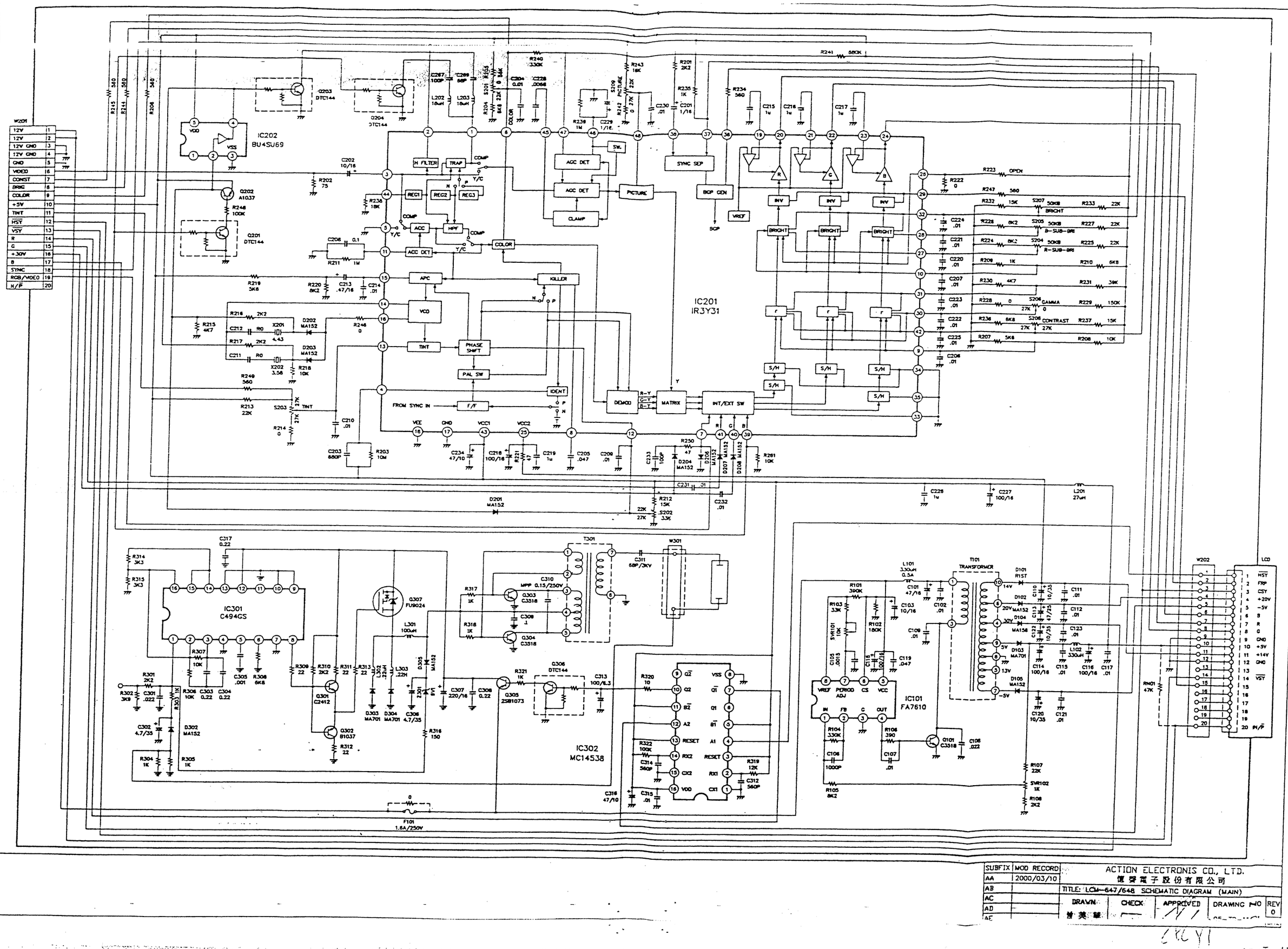
DRAWN	CHECK	APPROVED	DRAWING NO
曾美華			05-T0-1101

SUBFIX	MOD RECORD
AA	2000/03/10
AB	
AC	
AD	
AE	

ACTION ELECTRONIS CO., LTD.
復聲電子股份有限公司

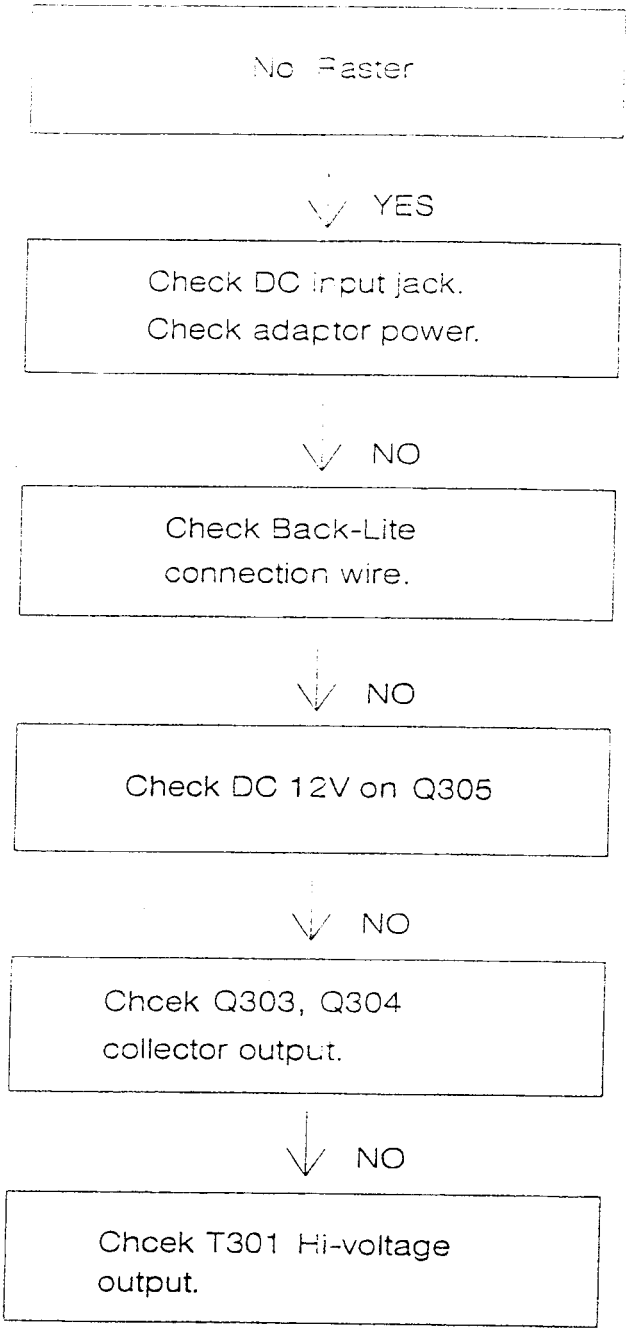
TITLE: LCM-647/648 SCHEMATIC DIAGRAM (MAIN)

DRAWN	CHECK	APPROVED	DRAWING NO	REV
曾美華				0


W201
12V
12V
12V GND
12V GND
GND
VIDEO
CONST
BRIG
COLOR
+5V
TINT
HSY
VSY
R
G
+30V
B
SYNC
RGB/VIDEO
N/P
IC202
BU4SU69
VDD
VSS
Q203 DTC144
Q204 DTC144
Q202 A1037
Q201 DTC144
IC201
IR3Y31
H FILTER
TRAP
COMP
Y/C
REG1
REG2
REG3
ACC
HPF
ACC DET
COLOR
APC
KILLER
VCO
TINT
PHASE SHIFT
PAL SW
IDENT
F/F
FROM SYNC IN
AGC DET
AGC DET
CLAMP
PICTURE
SW.
SYNC SEP
BGP GEN
VREF
BGP
DEMOD
MATRIX
INT/EXT SW
R-Y
G-Y
B-Y
INV
BRIGHT
S/H
OPEN
BRIGHT
B-SUB-BRI
R-SUB-BRI
CONTRAST
GAMMA
IC301
C494GS
IC302
MC14538
IC101
FA7610
T101
TRANSFORMER
T301
W301
W202
LCD
RN101 47K
F101 1.6A/250V
SUBFIX
MOD RECORD
AA 2000/03/10
AB
AC
AD
AE
ACTION ELECTRONIS CO., LTD.
偉聖電子股份有限公司
TITLE: LCM-647/648 SCHEMATIC DIAGRAM (MAIN)
DRAWN
CHECK
APPROVED
DRAWING NO
REV 0

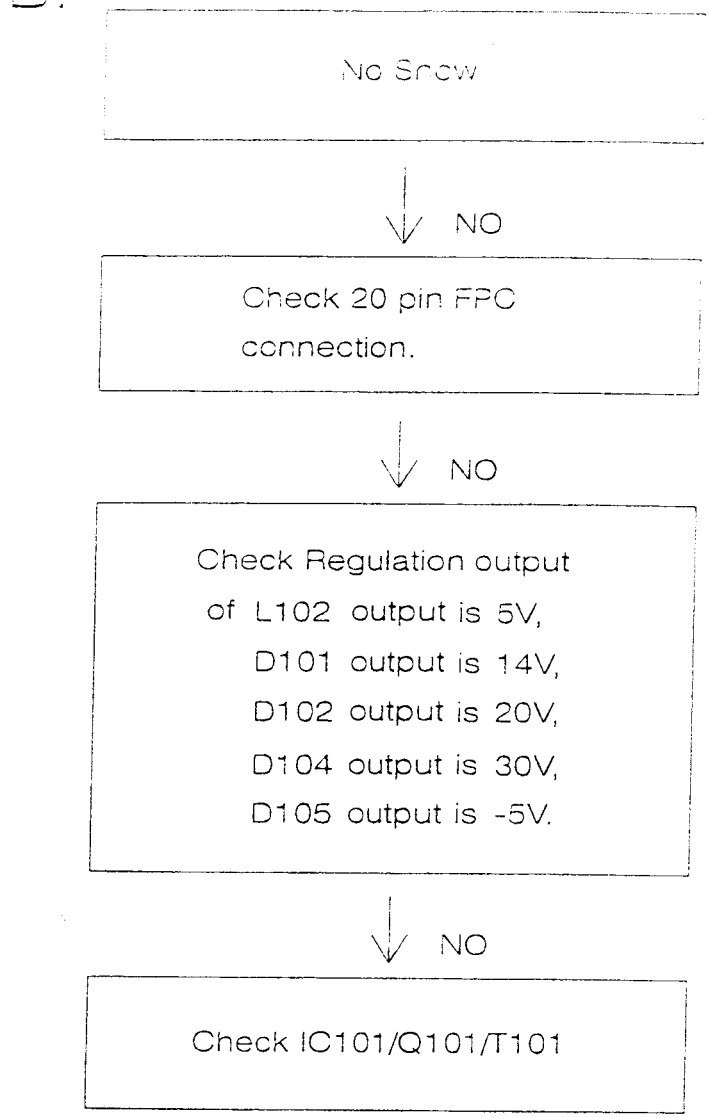
TROUBLE SHOOTING FLOW CHART

A.



TROUBLE SHOOTING FLOW CHART

B.



ALIGNMENT PROCEDURE

1. WORKING VOLTAGES CONFIRMATION

1) 5.0V voltage adjustment:
Adjust S102 to make the voltage of the positive pole of C116 be 5.10 ± 0.05V.

2) Other working voltages confirmation:
C110 ⊕: 14V ± 1V
C113 ⊕: 20V ± 1.5V
C122 ⊕: 30V ± 2V
C120 ⊕: −5V ± 0.5V

2. H-POSITION ADJUSTMENT
If the picture is not at the center of the screen, adjust the H-POS on the back of LCD to get the correct horizontal position.

REVISION	0

MODEL NO:LCM-646/647R OUTPUT: 50mW DATE:90/04/25

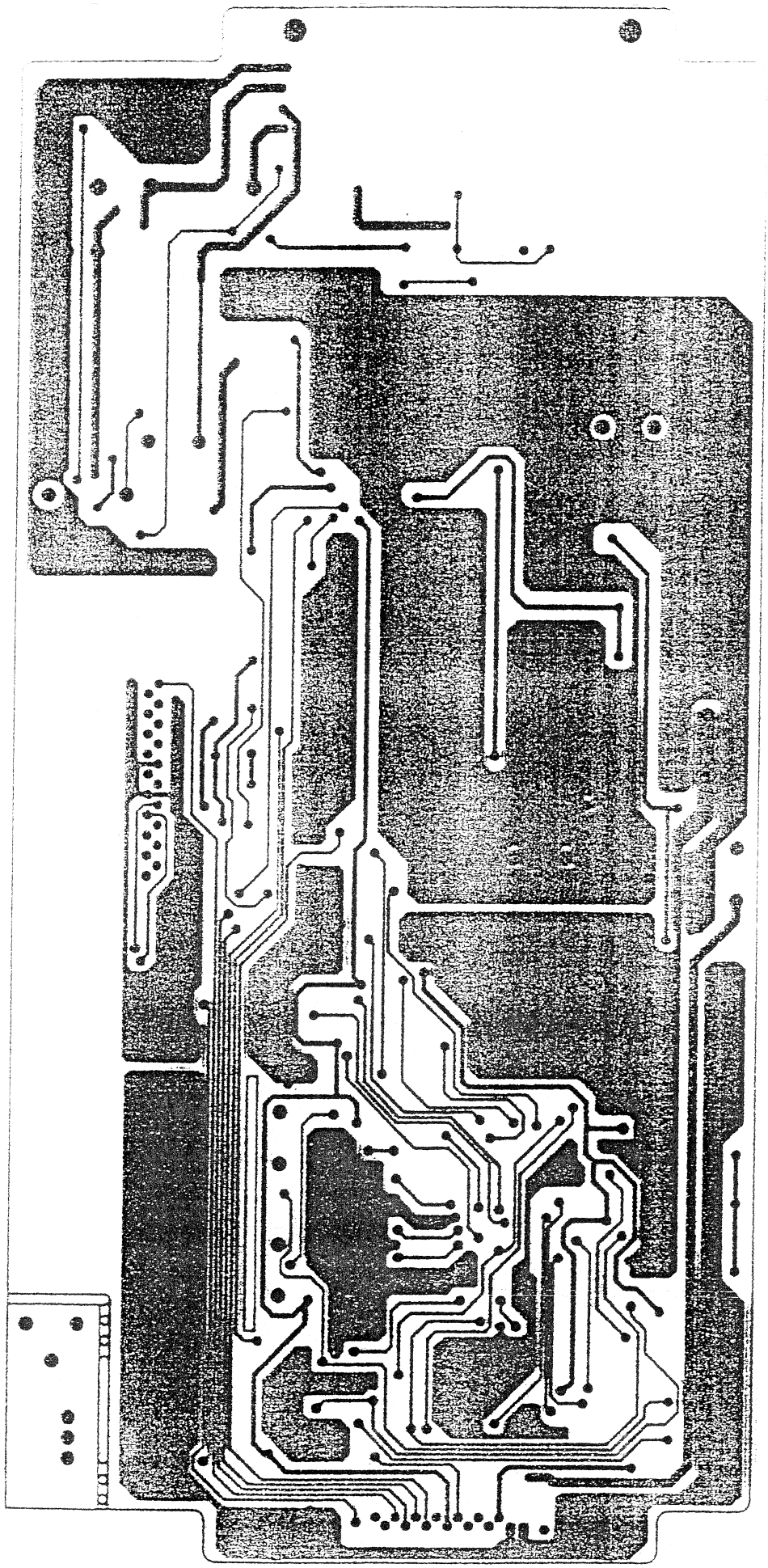
SUPPLY VOLTAGE:DC 12V LOAD: 8 Ohm TEST:C.H.Yang

PAGE1

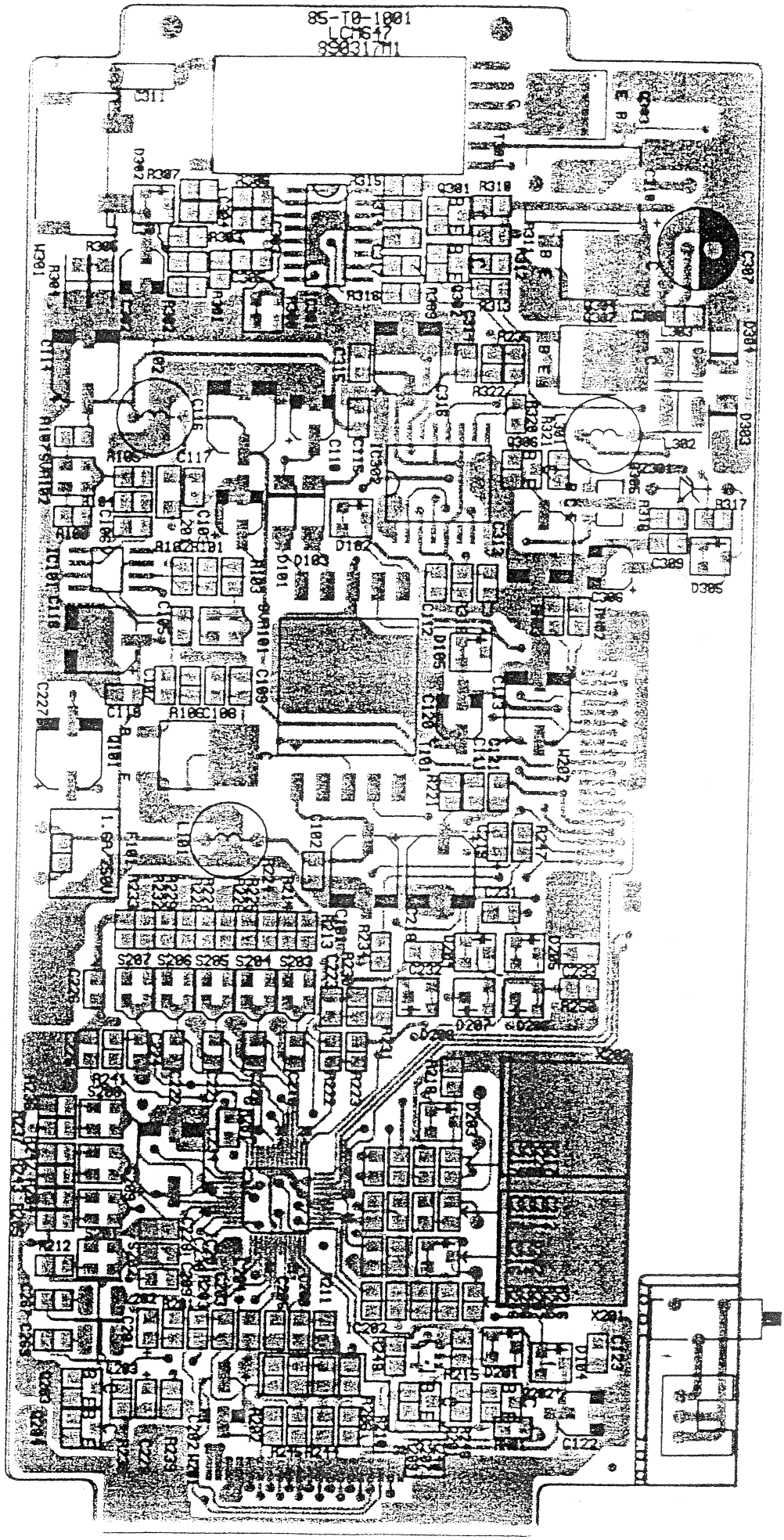
DESCRITION	UNIT	LIMIT	NOMINAL	NO.1	NO.2	NO.3	NO.4
VA TEST							
H.V. MAX.	Vp-p	1500	1800				
Q101 C PIN	Vp-p	15	17				
D101 14VDC	V	14± 0.4	14				
L102 5VDC	V	5 + 0.2 - 0	5				
D102 20VDC	V	20 + 3 - 1	20				
D104 30VDC	V	30 + 3 - 1	30				
D105 -5VDC	V	-5 ± 0.2	-5				
DC CONSUMPTION	W	9	6				
LUMINANCE *	LUX	180	240				

91-T0-8002

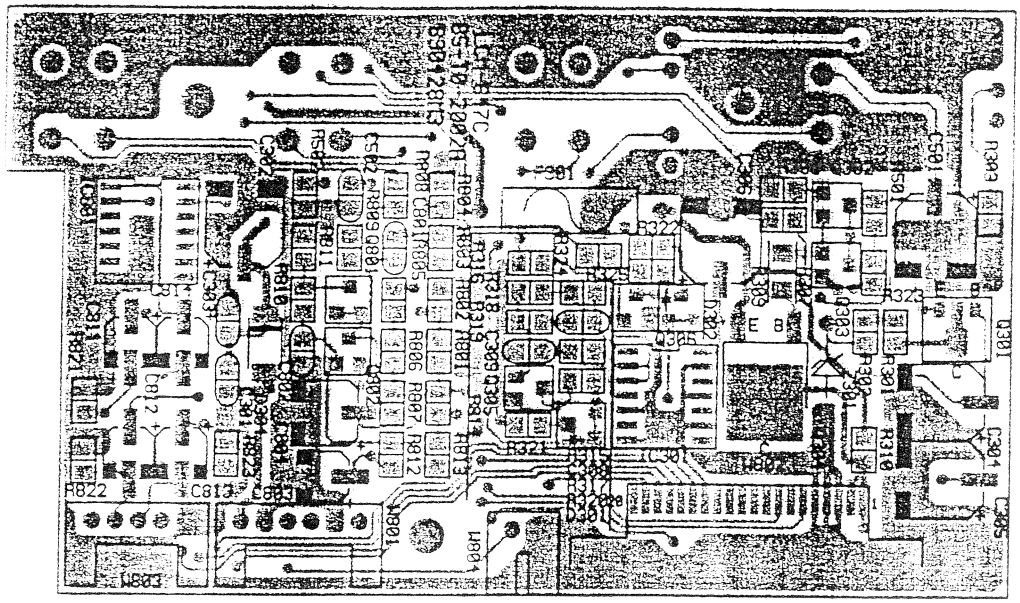
MAIN P.C.B (BOTTOM VIEW)



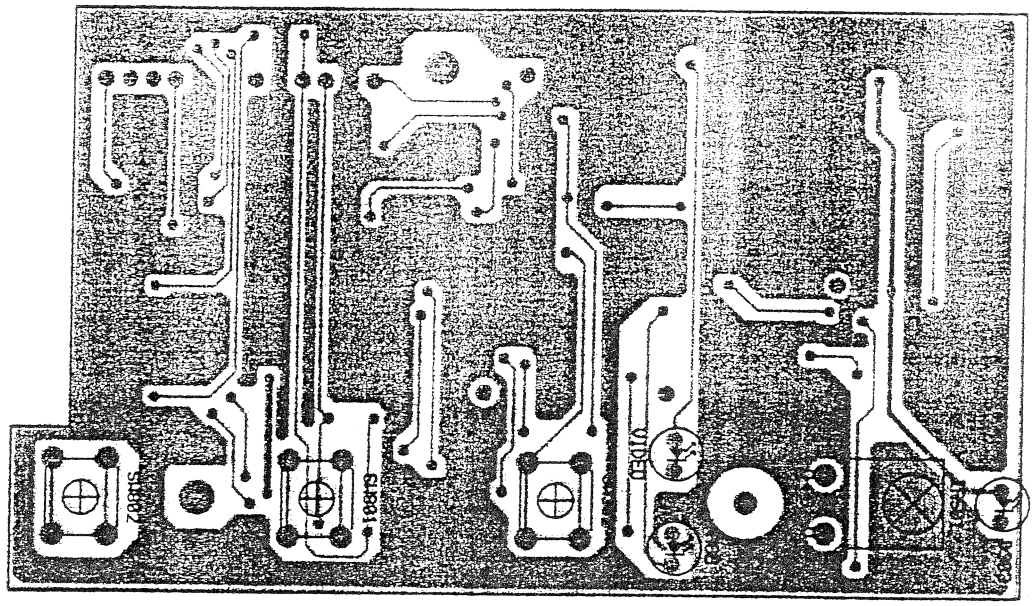
MAIN P.C.B (TOP VIEW)



POWER/REMOTE P.C.B (TOP VIEW)

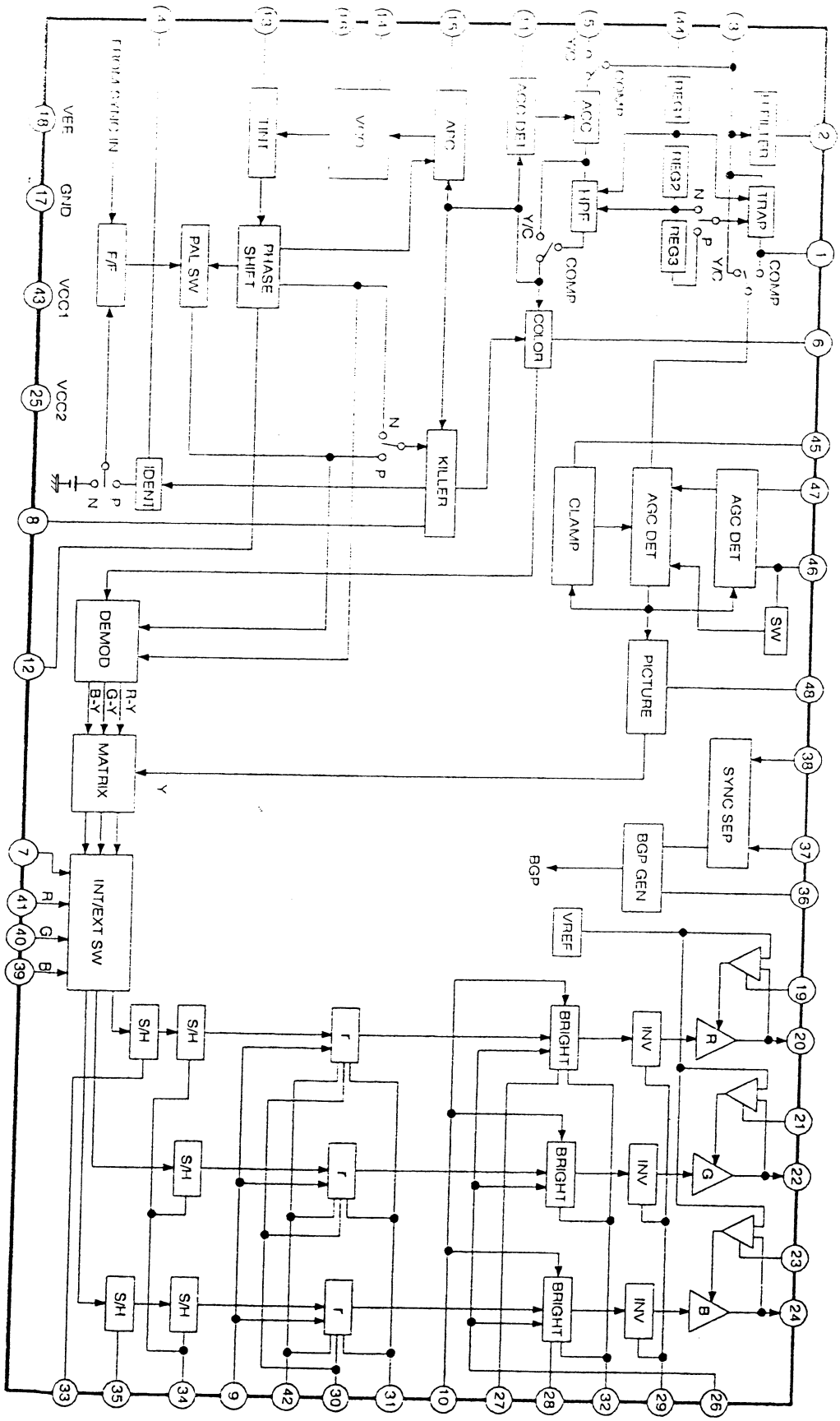


POWER/REMOTE P.C.B (BOTTOM VIEW)



IC BLOCK DESIGNATION

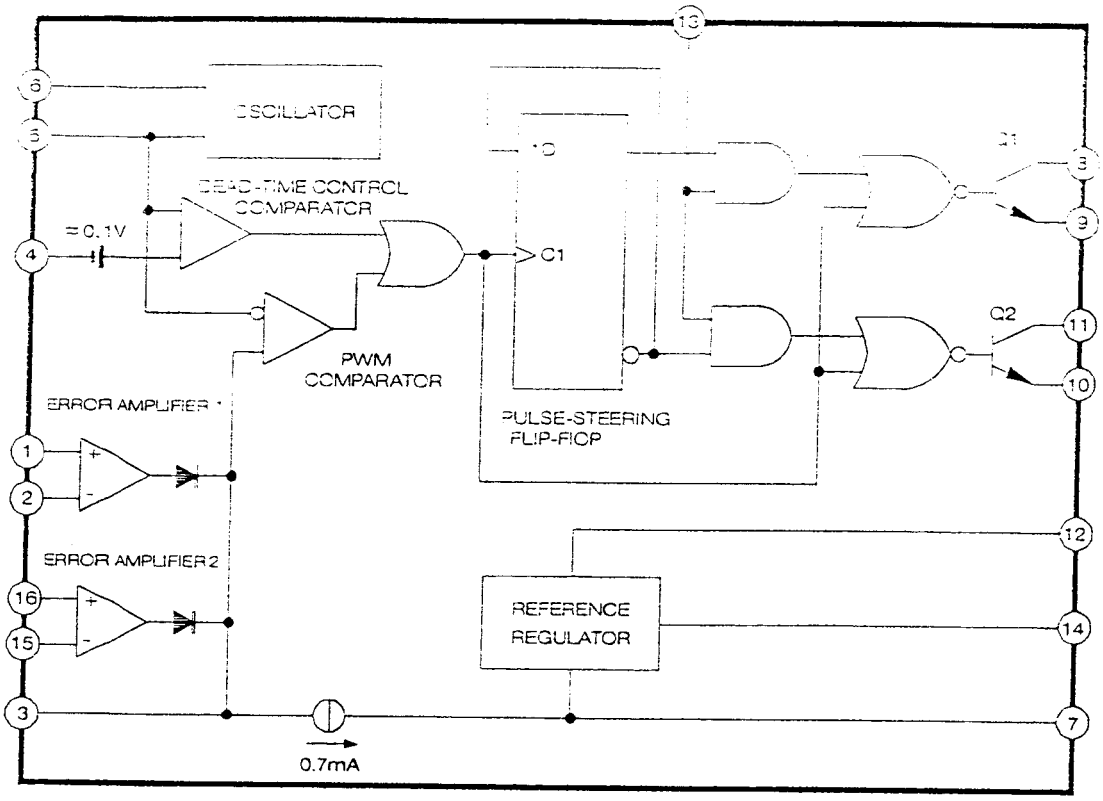
IR3Y31



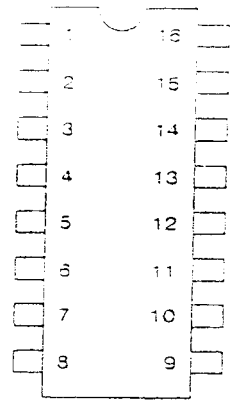
1. TRAP
2. H FILTER OUT
3. VIDEO IN
4. IDENT FILTER
5. C IN
6. COLOR
7. SW
8. KILLER FILTER
9. PEAK LIMITTER
10. RGB AMPLITUDE
11. ACC FILTER
12. R-Y/B-Y PHASE
13. TINT
14. VCO IN
15. APC FILTER
16. VCO OUT
17. GND
18. VEE
19. R DC DET
20. R OUT
21. G DC DET
22. G OUT
23. B DC DET
24. B OUT
25. Vcc 2
26. BLK
27. SUB BRIGHT R
28. SUB BRIGHT B
29. FRP
30. GAMMA1
31. GAMMA2
32. BRIGHT
33. S/H PULSE R
34. S/H PULSE G
35. S/H PULSE B
36. SYNC IN
37. SYNC OUT
38. SYNC SEP
39. EXT B IN
40. EXT G IN
41. EXT R IN
42. CONTRAST
43. Vcc 1
44. F ADJ
45. CLAMP
46. AGC FILTER
47. AGC OUT
48. PICTURE

IC BLOCK DESIGNATION

C494GS

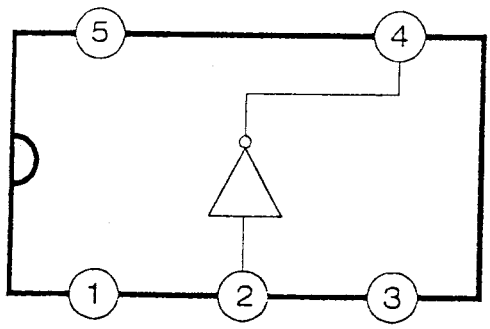


C494GS



1. 1IN+
2. 1IN-
3. FEEDBACK
4. DTC
5. CT
6. RT
7. GND
8. C1
9. E1
10. E2
11. C2
12. VCC
13. OUTPUT CTRL
14. REF
15. 2IN-
16. 2IN+

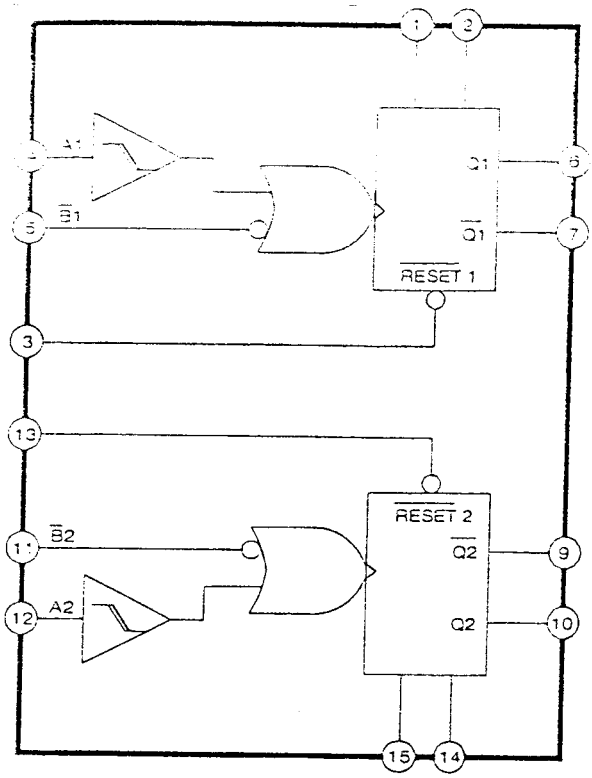
BU4SU69

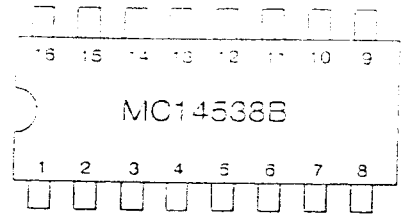


1. NC
2. IN A
3. VSS
4. OUT X
5. VDD

IC BLOCK DESIGNATION

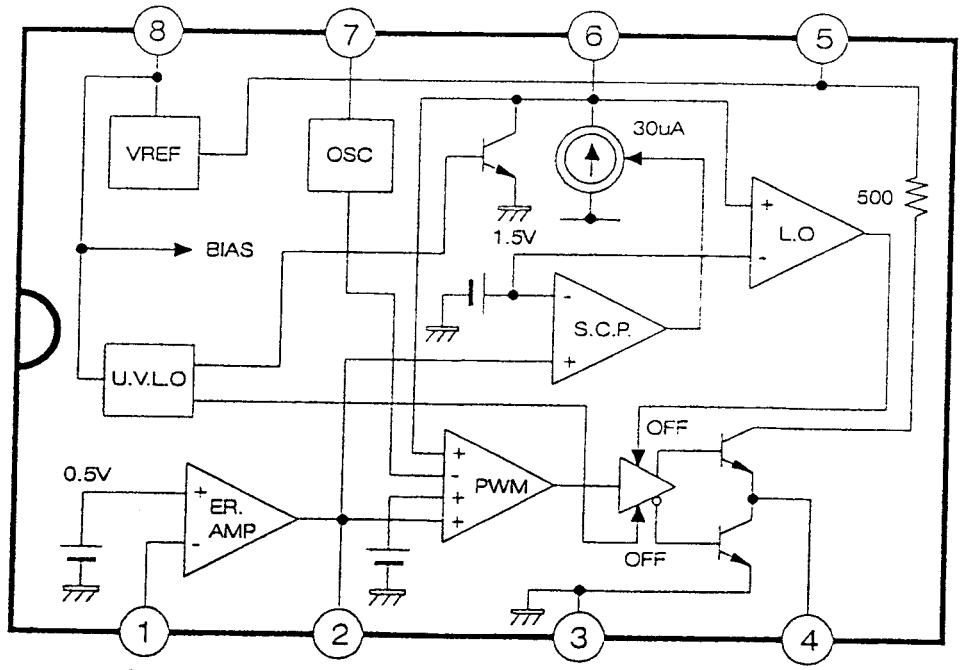
MC14538B





1. VSS
2. CX/RX1
3. RESET 1
4. A1
5. B1
6. Q1
7. Q1
8. VSS
9. Q2
10. Q2
11. B2
12. A2
13. RESET 2
14. CX/RX2
15. VSS
16. VDD

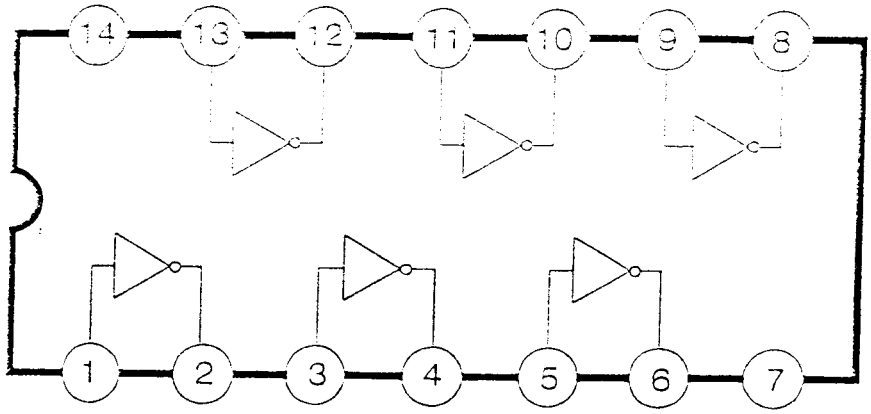
FA7610P



1. IN (-)
2. FB
3. GND
4. OUT
5. VCC
6. CS
7. CT
8. REF

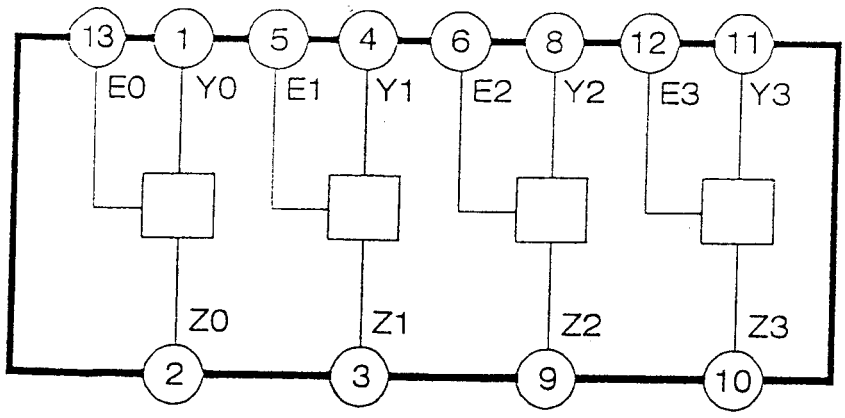
IC BLOCK DESIGNATION

BU4069UBF

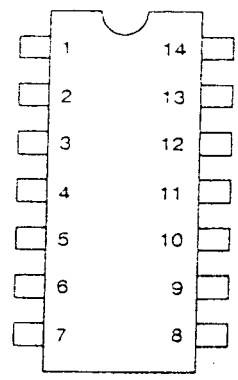


1. I1
2. O1
3. I2
4. O2
5. I3
6. O3
7. VSS
8. O4
9. I4
10. O5
11. I5
12. O6
13. I6
14. VDD

MC14066B

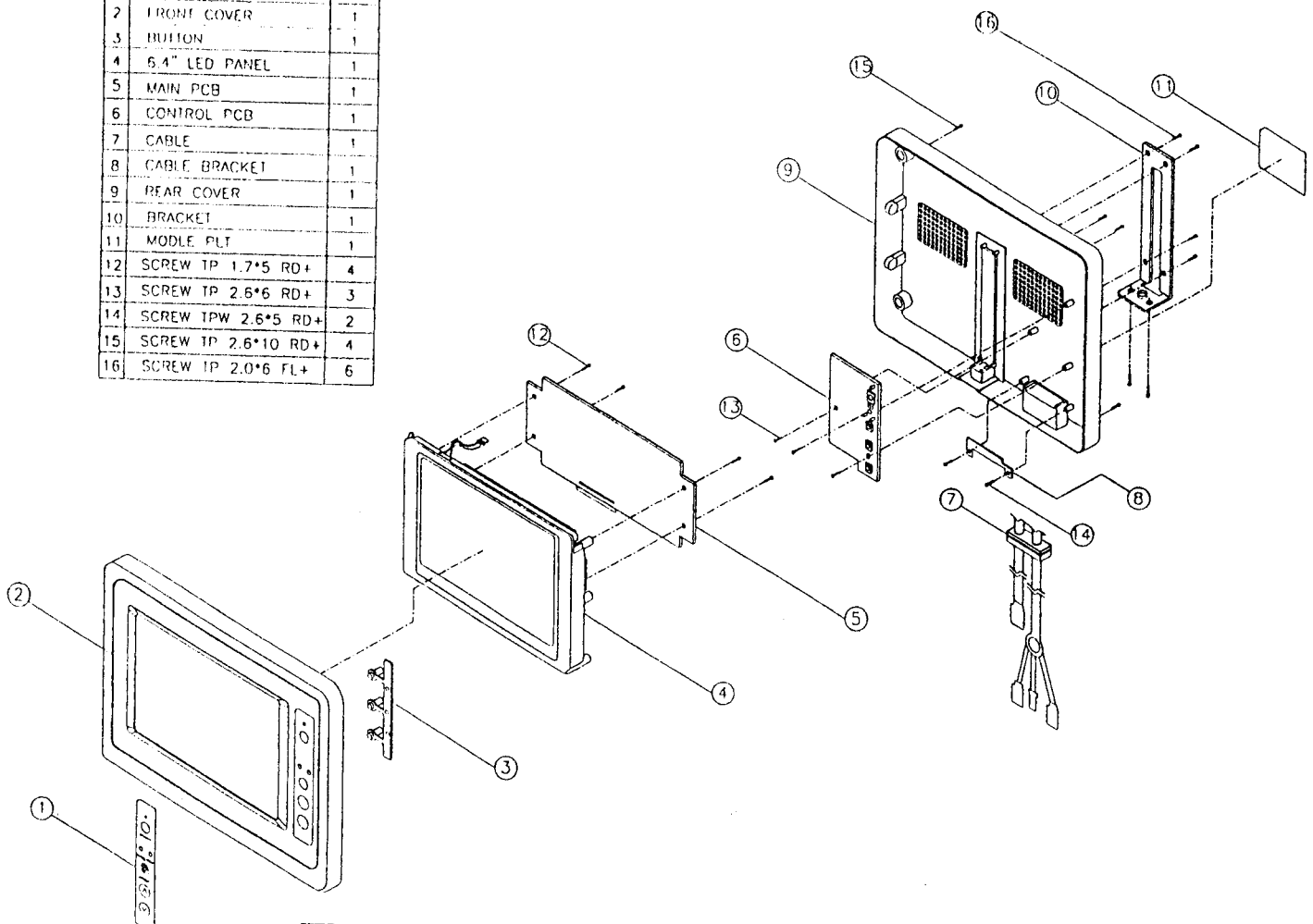


MC14066B



1. Y0
2. Z0
3. Z1
4. Y1
5. E1
6. E2
7. VSS
8. Y2
9. Z2
10. Z3
11. Y3
12. E3
13. E0
14. VDD

No	PART NAME	Q'TY
1	NAME PLT	1
2	FRONT COVER	1
3	BUTTON	1
4	6.4" LED PANEL	1
5	MAIN PCB	1
6	CONTROL PCB	1
7	CABLE	1
8	CABLE BRACKET	1
9	REAR COVER	1
10	BRACKET	1
11	MODLE PLT	1
12	SCREW TP 1.7*5 RD+	4
13	SCREW TP 2.6*6 RD+	3
14	SCREW TPW 2.6*5 RD+	2
15	SCREW TP 2.6*10 RD+	4
16	SCREW TP 2.0*6 FL+	6



ANGULAR ±0.5'			
DIMENSION	TOLERANCE		
0~4	±0.05	±0.1	±0.2
4~16	±0.08	±0.15	±0.3
16~63	±0.12	±0.25	±0.5
63~250	±0.20	±0.4	±0.8
OVER 250	±0.4	±0.5	±1.0

6 5 4 3 2 1

No. RESVIONS

材質 顏色 處理 用量 模孔

單位 mm | 比例 1/1 | 專出用於 LCM 647 | 核準 | 製圖

名稱 EXPLODED VIEW | 圖號 88-T0-0002

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